

WHAT IS CLAIMED IS:

1. In a coupling assembly for linearly joining and sealing the outer diameters of pipe ends, of the type having one or more clamping band which surrounds said pipe ends and an elastomeric circumferential sealing gasket between said one or more clamping band and said outer diameters, and wherein the inner surface of said sealing gasket forms a seal around said outer diameters, the improvement wherein said inner surface comprises a lubricious and acid-resistant polymer.
2. A coupling assembly according to Claim 1 wherein said lubricious polymer belongs to the group containing teflon, polypropylene, polyethylene, delryn, and nylon.
3. A coupling assembly of Claim 1 wherein said lubricious and acid-resistant polymer comprises teflon.
4. A coupling assembly according to Claim 1 wherein said elastomeric sealing gasket is an integrally formed component including an elastomeric base and said lubricious and acid-resistant polymer inner surface.
5. A coupling according to Claim 4 wherein said elastomeric base is insert-molded around said lubricious and acid-resistant inner surface.
6. A coupling assembly according to Claim 1, further adapted for linearly joining and sealing a first pipe end having a larger outer diameter to a second

pipe end having a smaller outer diameter, and including a transition bushing between said sealing gasket and said second pipe end, and wherein the inner surface of said transition bushing forms a seal around said smaller outer diameter and said inner surface of said sealing gasket forms a seal around the outer surface of said transition bushing, the further improvement wherein said inner and outer surfaces of said transition bushing also comprise a lubricious and acid resistant polymer.

7. A coupling assembly according to Claim 6 wherein said lubricious polymer belongs to the group containing teflon, polypropylene, polyethylene, delryn, and nylon.
8. A coupling assembly of Claim 6 wherein said lubricious and acid-resistant polymer comprises teflon.
9. A coupling assembly according to Claim 6 wherein said elastomeric sealing gasket and said transition bushing are each integrally formed components including an elastomeric base and said lubricious and acid-resistant polymer surfaces.
10. A coupling according to Claim 9 wherein said elastomeric bases are insert-molded to said lubricious and acid-resistant surface.
11. In a coupling assembly for linearly joining and sealing the outer diameters of pipe ends, of the type having one or more clamping band which surrounds said pipe ends and an elastomeric circumferential sealing gasket between said

one or more clamping band and said outer diameters, and wherein the inner surface of said sealing gasket forms a seal around said outer diameters and includes an inwardly protruding circular flange disposed between said pipe ends, the improvement wherein said inner surface and said inwardly protruding flange comprise a lubricious and acid-resistant polymer.

12. A coupling assembly according to Claim 11 wherein said lubricious polymer belongs to the group containing teflon, polypropylene, polyethylene, delryn, and nylon.
13. A coupling assembly of Claim 11 wherein said lubricious and acid-resistant polymer comprises teflon.